



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/027,717

12/20/2001

Scott R. Boerke

01-440

9749

719

7590

11/29/2006

CATERPILLAR INC.
100 N.E. ADAMS STREET
PATENT DEPT.
PEORIA, IL 616296490

EXAMINER

JARRETT, SCOTT L

ART UNIT

PAPER NUMBER

3623

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,717

Applicant(s)

BOERKE ET AL.

Examiner

Scott L. Jarrett

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Non-Final Office Action is in response to Applicant's submission filed October 10, 2006. Currently Claims 1-55 are pending.

Response to Amendment

2. The Objection to Claims 23 and 45 is withdrawn.

The 35 U.S.C. 112(2) rejection of Claims 23 and 45 is withdrawn.

Response to Arguments

3. Applicant's arguments, see Paragraphs 3-4, Page 3, filed October 10, 2006, with respect to the rejection(s) of claim(s) 1-55 under Pyron have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Maskell, Brian, Performance Measurement for World Class Manufacturing (1991), Standfield, Timothy Charles, The effects of feedback and goal setting on manufacturing productivity improvement (1997), and Modflow Announces the Release of EZ-Track 1.0 (2001).

Title

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Method for Determining a Variance Between The Target and Actual Number of Tasks Performed.

Claim Objections

5. Claims 1-49 are objected to because of the following informalities. Appropriate correction is required.

Regarding Claims 1, 8 and 48, Claims 1, 8 and 48 recite "time slot" instead of the intended "timeslot".

Regarding Claims 26 and 48, Claims 28 and 48 recite "sub-subtasks" instead of the intended "subtasks."

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 21-22 and 48-49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 21, Claim 21 recites the limitation "to the at least one **employee**" in Claim 19. There is insufficient antecedent basis for this limitation in the claim. Examiner interpreted the claim to read "to the at least one **worker**" for the purposes of examination. Appropriate correction is required.

Regarding Claim 48, Claim 48 recites the limitation "**the** reason for the variance in a log " in Claim 19. There is insufficient antecedent basis for this limitation in the claim. Examiner interpreted the claim to read "**a** reason for the variance in a log" for the purposes of examination. Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-18 and 25 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Standfield, Timothy Charles, The effects of feedback and goal setting on manufacturing productivity improvement (1997).

Regarding Claim 1 Standfield teaches a method for tracking progress by at least one worker on a task over a period of time the task including a plurality of subtasks comprising:

- dividing the period of time into a plurality of timeslots (Figure 3; Page 38; Tables 7-8; Exhibits 1-2);
- determining a target number of subtasks to be completed during each timeslot (Paragraph 2, Page 12; Paragraph 2, Page 17; Page 18; Pages 31-35, Page 64; Figure 2);
- tracking an actual number of subtasks completed during each timeslot by the at least one worker (Last Paragraph, Page 3; Paragraphs 1-2, Page 4; Pages 31-35, 42-43; Exhibits 1-2);

Art Unit: 3623

- recording a variance between the actual number of subtasks completed and the target number associated with each timeslot (Paragraph 2, Page 12; Paragraph 2, Page 17; Page 18; Pages 31-35, Page 64; Exhibits 1-2);

- recording an accumulated variance associated with each time slot (Last Paragraph, Page 22; Pages 34-35, Number 10, Page 47; Paragraphs 2-3, Page 66; Exhibits 1-2); and

- recording a total variance for the predetermined time period (Exhibits 1-2).

HOLLENBECK AND KLEIN MODEL

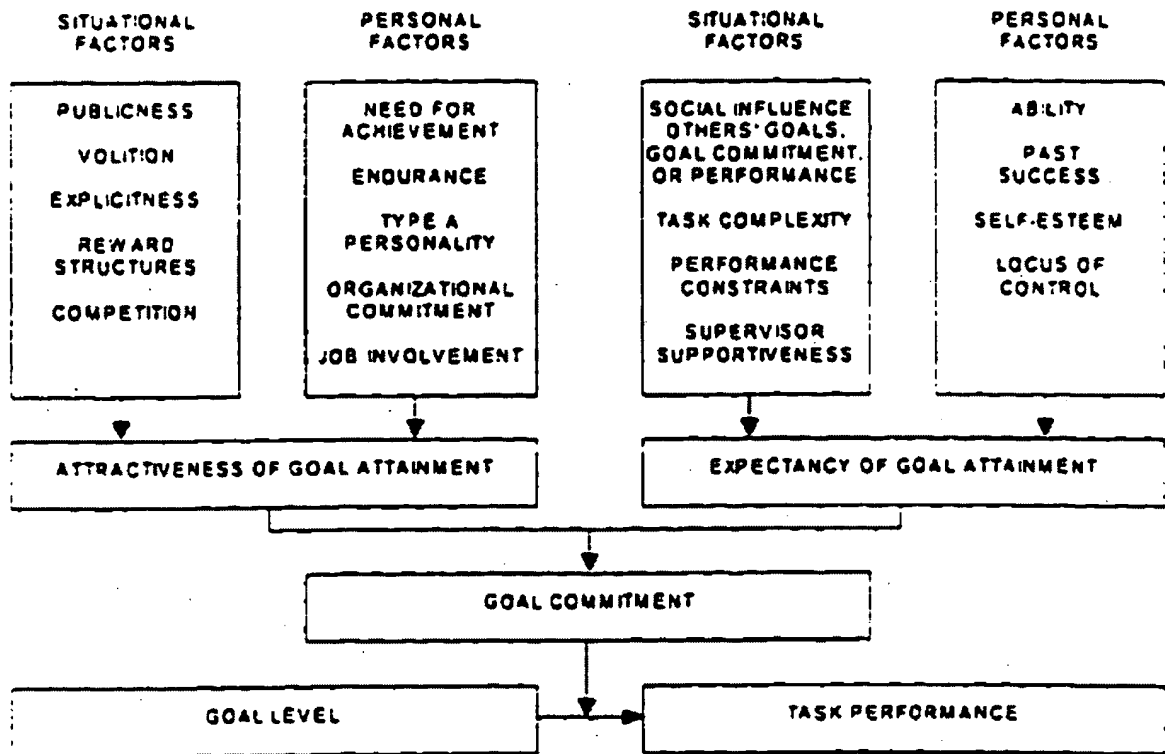


Figure 1

PRODUCTIVITY IMPROVEMENT THROUGH GOAL SETTING AND FEEDBACK MODEL

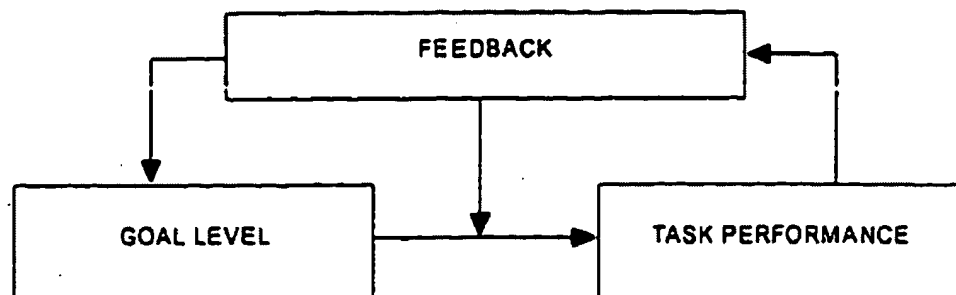


Figure 2

Figure 1: Exhibit 1

PRODUCTIVITY MEASUREMENT BOARD

TODAYS DATE: _____

TODAYS GOALS ARE

FIRST SHIFT PRODUCTION	SECOND SHIFT PRODUCTION	THIRD SHIFT PRODUCTION
<input type="text"/> CHAIRS PER HOUR	<input type="text"/> CHAIRS PER HOUR	<input type="text"/> CHAIRS PER HOUR
<input type="text"/> CHAIRS PER SHIFT	<input type="text"/> CHAIRS PER SHIFT	<input type="text"/> CHAIRS PER SHIFT
<input type="text"/> CHAIRS PER WEEK	<input type="text"/> CHAIRS PER WEEK	<input type="text"/> CHAIRS PER WEEK

PRODUCTION HOUR	FIRST SHIFT	FIRST SHIFT (%)	COMMENTS	SECOND SHIFT	SECOND SHIFT (%)	COMMENTS	THIRD SHIFT	THIRD SHIFT (%)	COMMENTS
1									
2									
3									
4									
5									
6									
7									
8									
TOTALS									

DAY OF WEEK	FIRST SHIFT CUMULATIVE PERFORMANCE	SECOND SHIFT CUMULATIVE PERFORMANCE	THIRD SHIFT CUMULATIVE PERFORMANCE
MONDAY			
TUESDAY			
WEDNESDAY			
THURSDAY			
FRIDAY			
SATURDAY			
SUNDAY			
WEEKLY TOTAL			

Figure 2: Exhibit 2

Regarding Claims 2-3 Standfield teaches a method for tracking progress on a task wherein the period of time is predetermined and varies (Last Paragraph, Page 22; Paragraph 2, Page 43).

Regarding Claims 4 and 20 Standfield teaches a method for tracking progress on a task wherein the total variance is performed without reference to the workers (e.g. shift/cell level performance/productivity; Tables 6-8; Exhibits 1-2).

Art Unit: 3623

Regarding Claim 5 Standfield teaches a method for tracking progress on a task wherein the variances are temporarily recorded (Last Paragraph, Page 22; Pages 34-35; Number 10, Page 47; Paragraphs 2-3, Page 66; Exhibits 1-2).

Regarding Claim 6 Standfield teaches a method for tracking progress on a task wherein the total variance is recorded in a log (Last Paragraph, Page 22; Pages 34-35; Number 10, Page 47; Paragraphs 2-3, Page 66; Exhibits 1-2).

Regarding Claim 7 Standfield teaches a method for tracking progress on a task wherein the total variance is for a plurality of periods (Exhibits 1-2).

Regarding Claim 8 Standfield teaches a method for tracking progress on a task wherein the target number of subtasks to be completed during each timeslot is modified as a function of the recorded total variances (Last Paragraph, Page 3; Paragraphs 1-2, Page 4; Pages 31-35, 42-43).

Regarding Claims 9, 11, 13-16 and 17-18 Standfield teaches a method for tracking progress on a task wherein the timeslots and total variance are illustrated on a writeable medium including erasable medium, chalkboard, white board, piece of paper or computer spreadsheet (Last Paragraph, Page 22; Pages 34-35, performance board; Number 10, Page 47; Paragraphs 2-3, Page 66; Exhibits 1-2).

Art Unit: 3623

Regarding Claim 10 Standfield teaches a method for tracking progress on a task wherein the writeable medium includes locations for entry of the actual number of subtasks completed by each worker, the variance between the actual/target numbers and the accumulated variance in each time slot (Last Paragraph, Page 22; Pages 34-35; Number 10, Page 47; Paragraphs 2-3, Page 66; Exhibits 1-2).

Regarding Claim 12 Standfield teaches teach a method for tracking progress on a task wherein workers track the actual number of subtasks completed in each timeslot (Last Paragraph, Page 34; Paragraph 2, Page 68).

Regarding Claim 25 Standfield teaches teach a method for tracking progress on a task further comprising providing diagnostics on the completion of the task (Paragraph 2, Page 12; Paragraph 2, Page 17; Page 18; Pages 31-35, Page 64).

Art Unit: 3623

10. Claims 26-42 and 45-55 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Maskell, Brian, Performance Measurement for World Class Manufacturing (1991).

Regarding Claim 26 Maskell teaches a method for tracking progress, by at least one worker, on a task over a period of time, the task including a plurality of subtasks comprising:

- dividing the period of time into a plurality of timeslots (Figures 4-2, 4-3, 4-14, 5-6);
- determining a target number of subtasks to be completed during each timeslot (Pages 99, 129, 131; Figures 4-2, 4-3, 4-7, 4-8, 4-9, 4-11, 4-14, 5-3, 5-9);
- tracking an actual number of subtasks completed during each timeslot by the at least one worker within each timeslot (Paragraph 4, Page 35; Paragraphs 1-3, Page 77; Paragraphs 1-2, Page 95; Paragraphs 1-3, Page 97; Pages 99, 101; Figures 4-2, 4-3, 4-7, 4-8, 4-9, 4-11, 4-14);
- recording a total variance for the time period (Paragraph 4, Page 35; Paragraphs 1-3, Page 77; Paragraphs 1-2, Page 95; Paragraphs 1-3, Page 97; Pages 99, 101; Figures 4-2, 4-3, 4-7, 4-8, 4-9, 4-11, 4-14); and
- recording a reason for the variance when the variance is a nonzero number (i.e. when there is a variance; Last paragraph, Page 34; Paragraphs 1-3, Page 35; Paragraph 1, Page 36; Last Paragraph, Page 75).

Regarding Claim 27 Maskell teaches a method for tracking progress on a task wherein the period of time is predetermined (Paragraph 1, Page 33; Paragraphs 1-2, Page 37; Last Paragraph, Page 101).

Regarding Claims 28 and 29 Maskell teaches a method for tracking progress on a task further comprising (Paragraph 4, Page 35; Paragraphs 1-3, Page 77; Paragraphs 1-2, Page 95; Paragraphs 1-3, Page 97; Pages 99, 101; Figures 4-2, 4-3, 4-7, 4-8, 4-9, 4-11, 4-14):

- recording an accumulated variance associated with each time slot; and
- recording a total variance for the predetermined time period.

Regarding Claim 30 Maskell teaches a method for tracking progress on a task wherein the variances are temporarily recorded (Page 33; Paragraphs 1-3, Page 35; Last Paragraph, Page 36; Paragraphs 1-3, Page 37; Last Paragraph, Page 76; Paragraphs 1-3, Page 77; Paragraph 3, Page 99; Last Paragraph, Page 101; Figures 4-2, 4-3, 4-7, 4-8, 4-9, 4-11, 4-14).

Regarding Claim 31 Maskell teaches a method for tracking progress on a task wherein the total variance is recorded in a log (Page 33; Paragraphs 1-3, Page 35; Last Paragraph, Page 36; Paragraphs 1-3, Page 37; Last Paragraph, Page 76; Paragraphs 1-3, Page 77; Paragraph 3, Page 99; Last Paragraph, Page 101; Figures 4-2, 4-3, 4-7, 4-8, 4-9, 4-11, 4-14).

Regarding Claims 32, 34, 36-38 and 40-41 Maskell teaches a method for tracking progress on a task wherein the timeslots and total variance are illustrated on a writeable medium including erasable medium, chalkboard, white board, piece of paper or computer spreadsheet (direct display methods, direct reporting; boards, charts, signals, graphs, chalkboards, electronic display screens, etc.; Page 33; Paragraphs 1-3, Page 35; Last Paragraph, Page 36; Paragraphs 1-3, Page 37; Last Paragraph, Page 76; Paragraphs 1-3, Page 77; Paragraph 3, Page 99; Last Paragraph, Page 101).

Regarding Claim 33 Maskell teaches a method for tracking progress on a task wherein the writeable medium includes locations for entry of the actual number of subtasks completed by each worker, the variance between the actual/target numbers and the accumulated variance in each time slot (Page 33; Paragraphs 1-3, Page 35; Last Paragraph, Page 36; Paragraphs 1-3, Page 37; Last Paragraph, Page 76; Paragraphs 1-3, Page 77; Paragraph 3, Page 99; Last Paragraph, Page 101).

Regarding Claim 35 Maskell teaches a method for tracking progress on a task wherein workers track the actual number of subtasks completed in each timeslot (Last Paragraph, Page 101; Page 129; Figures Figure 4-5, 5-3)

Regarding Claim 39 Maskell teaches a method for tracking progress further comprising recording a total variance for the time period and reason for the variance on

Art Unit: 3623

a writeable medium (Last Paragraph, Page 34; Paragraphs 1-3, Page 35; Paragraph 1, Page 36; Last Paragraph, Page 75).

Regarding Claim 42 Maskell teaches a method for tracking progress on a task wherein the target number of subtasks to be completed during each timeslot is modified as a function of the recorded total variances and the reason for the variance (fishbone diagram, SPC, continuous improvement, etc.; Paragraphs 1-2, Page 35; Paragraphs 2-3, Page 36; Paragraphs 1-3, Page 37).

Regarding Claim 45-46 Maskell teaches a method for tracking progress on a task further comprising planning a number of workers for at least a portion of the period of time based on the number of tracks (subtasks, tasks, steps, etc.) in a workflow based on the target number and reallocating a worker based on the planned number of workers (Paragraph 3, Page 85).

Regarding Claim 47 Maskell teaches a method for tracking progress on a task further comprising providing diagnostics on the completion of the task (Page 33; Paragraphs 1-3, Page 35; Last Paragraph, Page 36; Paragraphs 1-3, Page 37; Last Paragraph, Page 76; Paragraphs 1-3, Page 77; Paragraph 3, Page 99; Last Paragraph, Page 101).

Art Unit: 3623

Regarding Claim 48 Maskell teaches a method for tracking progress, by at least one worker, on a task over a predetermined period of time, the task including a plurality of subtasks comprising:

- dividing the period of time into a plurality of timeslots (Figures 4-2, 4-3, 4-14, 5-6);
- determining a target number of subtasks to be completed during each timeslot (Pages 99, 129, 131; Figures 4-2, 4-3, 4-7, 4-8, 4-9, 4-11, 4-14, 5-3, 5-9);
- tracking an actual number of subtasks completed during each timeslot by the at least one worker (Paragraph 4, Page 35; Paragraphs 1-3, Page 77; Paragraphs 1-2, Page 95; Paragraphs 1-3, Page 97; Pages 99, 101; Figures 4-2, 4-3, 4-7, 4-8, 4-9, 4-11, 4-14);
- temporarily recording a variance between the actual number of subtasks completed and the target number associated with each timeslot (Paragraph 4, Page 35; Paragraphs 1-3, Page 77; Paragraphs 1-2, Page 95; Paragraphs 1-3, Page 97; Pages 99, 101; Figures 4-2, 4-3, 4-7, 4-8, 4-9, 4-11, 4-14);
- temporarily recording an accumulated variance associated with each time slot (Paragraph 4, Page 35; Paragraphs 1-3, Page 77; Paragraphs 1-2, Page 95; Paragraphs 1-3, Page 97; Pages 99, 101; Figures 4-2, 4-3, 4-7, 4-8, 4-9, 4-11, 4-14);
- recording a total variance for the predetermined time period and a reason for the variance in a log (Paragraph 4, Page 35; Paragraphs 1-3, Page 77; Paragraphs 1-2, Page 95; Paragraphs 1-3, Page 97; Pages 99, 101; Figures 4-2, 4-3, 4-7, 4-8, 4-9, 4-11, 4-14); and

- modifying the target number of subtasks to be completed during at least one timeslot as a function of the total variance (statistical process control, continuous improvement; Last Paragraph, Page 33; Paragraphs 2-3, Page 35; Paragraph 1, Page 87).

Regarding Claim 49 Maskell teaches a method for tracking progress on a task wherein recording a total variance is performed without reference to the at least one worker (Paragraph 2, Page 37; Bullet 4, Page 78; Figure 4-14).

Regarding Claim 50 Maskell teaches a method for tracking progress by at least one worker on a task over a period of time the task including a plurality of subtasks comprising:

- dividing the period of time into a plurality of timeslots (Figures 4-2, 4-3, 4-14, 5-6);
- determining a target number of subtasks to be completed during each timeslot (Pages 99, 129, 131; Figures 4-2, 4-3, 4-7, 4-8, 4-9, 4-11, 4-14, 5-3, 5-9);
- tracking an actual number of subtasks completed during each timeslot by the at least one worker (Paragraph 4, Page 35; Paragraphs 1-3, Page 77; Paragraphs 1-2, Page 95; Paragraphs 1-3, Page 97; Pages 99, 101; Figures 4-2, 4-3, 4-7, 4-8, 4-9, 4-11, 4-14);
- recording a variance between the actual number of subtasks completed and the target number associated with each timeslot (Paragraph 4, Page 35; Paragraphs 1-

Art Unit: 3623

3, Page 77; Paragraphs 1-2, Page 95; Paragraphs 1-3, Page 97; Pages 99, 101;

Figures 4-2, 4-3, 4-7, 4-8, 4-9, 4-11, 4-14);

- recording an accumulated variance associated with each time slot (Paragraph 4, Page 35; Paragraphs 1-3, Page 77; Paragraphs 1-2, Page 95; Paragraphs 1-3, Page 97; Pages 99, 101; Figures 4-2, 4-3, 4-7, 4-8, 4-9, 4-11, 4-14); and

- taking at least one action in response to the variance (Last Paragraph, Page 33; Paragraphs 2-3, Page 85; Paragraph 3, Page 85).

Regarding Claim 51 Maskell teaches a method for tracking progress on a task further comprising modifying at least one process in response the variance (Paragraphs 2-3, Page 25; Paragraphs 1-3, Page 37).

Regarding Claim 52 Maskell teaches a method for tracking progress on a task wherein the recording of the total variance is done without reference to the worker (Paragraph 2, Page 37; Bullet 4, Page 78; Figure 4-14).

Regarding Claim 53 Maskell teaches a method for tracking progress on a task further comprises analyzing the variance (Page 33; Paragraphs 2-3, Page 35; Paragraph 1, Page 36; Paragraphs 1-3, Page 37; Last Paragraph, Page 75; Paragraph 1, Page 87; Page 95; Figures 4-3, 4-6, 4-9, 5-3, 5-6).

Art Unit: 3623

Regarding Claim 54 Maskell teaches a method for tracking progress on a task further comprising taking an action in response to the analysis of the variance (Paragraphs 2-3, Page 35; Paragraphs 1-3, Page 37).

Regarding Claim 55 Maskell teaches a method for tracking progress on a task further comprising changing at least one process associated with the task (Paragraphs 1-3, Page 35; Paragraphs 1-3, Page 37; Paragraph 1, Page 87).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 19-20 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Standfield, Timothy Charles, The effects of feedback and goal setting on manufacturing productivity improvement (1997) as applied to claims 1-18 and 25 above, and further in view of Maskell, Brian, Performance Measurement for World Class Manufacturing (1991).

Regarding Claim 19 Standfield does not expressly teach recording a reason for a variance as claimed.

Haskell teaches a method for tracking progress on a task further comprising recording a reason for a variance between the actual/target number of subtasks completed when the variance is a nonzero number (i.e. when there is a variance) and recording the reason with the total variance (cause/reason; Last Paragraph, Page 34; Paragraphs 1-3, Page 35; Paragraph 1, Page 36; Last Paragraph, Page 75) in an analogous art of performance measurement for the purposes of determining and analyzing factors that effect the process, for example identifying the root cause of

Art Unit: 3623

process/production deviations in order to improve the process/worker productivity (Paragraphs 2-3, Page 35; Paragraph 1, Page 36; Paragraphs 1-3, Page 37).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for tracking progress on a task by at least one worker as taught by Standfield would have benefited from recording a reason for a variance between the actual/target number of subtasks completed when the variance is a nonzero number in view of the teachings of Maskell; the resultant method enabling businesses to identify the root cause of process/production deviations so that they may make improvements/adjustments to the process/worker productivity (Maskell: Pages 35-36).

Regarding Claims 23-24 Standfield does not expressly planning a number of workers for at least a portion of the period of time based on the number of tracks in a workflow based on the target number or reallocating a worker based on the planned number of workers as claimed.

Maskell teaches planning a number of workers for at least a portion of the period of time based on the number of tracks (subtasks, tasks, steps, etc.) in a workflow based on the target number and reallocating a worker based on the planned number of workers (Paragraph 3, Page 85) in an analogous art of performance measurement for

Art Unit: 3623

the purposes of allocating workers to complete the remaining work as well as analyzing workforce trends for future workforce forecasting (Paragraph 3, Page 85).

It would have been obvious to one skilled in the art at the time of the invention that the method for tracking progress on a task by at least one worker as taught by Standfield would have benefited from planning (allocating) and reallocating workers based on the tasks/subtasks targeted from completion in view of the teachings of Maskell; the resultant method enabling businesses to allocate workers to complete the remaining work, based on the current workload and/or performance of the workers, as well as analyzing workforce trends for future workforce forecasting (Maskell: Paragraph 3, Page 85).

Art Unit: 3623

13. Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Standfield, Timothy Charles, The effects of feedback and goal setting on manufacturing productivity improvement (1997) as applied to claims in view of Maskell, Brian, Performance Measurement for World Class Manufacturing (1991) and further in view of Modflow Announces the Release of EZ-Track 1.0 (2001).

Regarding Claim 21 Standfield does not expressly teach providing a variance card as claimed.

Maskell teaches providing a variance card (direct reporting, direct display, feedback, etc.; Page 33; Paragraphs 1-3, Page 35; Last Paragraph, Page 36; Paragraphs 1-3, Page 37; Last Paragraph, Page 76; Paragraphs 1-3, Page 77; Paragraph 3, Page 99; Last Paragraph, Page 101) in an analogous art of performance monitoring for the purposes of motivating workers to improve their performance (productivity) through well known performance/productivity monitoring and feedback techniques (Paragraph 2, Page 33).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for tracking progress on a task by at least one worker as taught by Standfield would have benefited providing a variance card (sheet, board, chart, etc.) to the at least one worker wherein the variance card reasons for the variance in view of the teachings of Maskell; the resultant method motivating workers to improve

Art Unit: 3623

their performance (productivity) through well known performance/productivity monitoring and feedback techniques (Maskell: Paragraph 2, Page 33).

Neither Standfield nor Maskell expressly teach providing a variance card, which includes a plurality of *predetermined* reasons which may be checked off to record the reason for variance as claimed.

Modflow teaches recording and classifying, via a plurality of predetermined classification codes/categories, reasons for variances (inefficiencies) related to workers, processes and/or machines (Abstract; Paragraphs 1, 3, Page 2; Paragraphs 1-4, Page 3) in an analogous art of performance monitoring for the purposes of enabling businesses to "identify inefficiencies and correct those problems" using a plurality of reports for further analysis (Abstract; Paragraphs 1, 3, Page 2).

It would have been obvious to one skilled in the art at the time of the invention that the method for tracking the progress on a task by at least one worker as taught by the combination of Standfield and Maskell would have benefited from recording and classifying, into a plurality of predetermined classes/categories, reasons for process inefficiencies, including but not limited to variances, in view of the teachings of Modflow; the resultant method enabling businesses to "identify inefficiencies and correct those problems" using a plurality of reports for further analysis (Modflow: Abstract; Paragraphs 1, 3, Page 2).

Regarding Claim 22 Standfield does not expressly teach that variance card further comprises a *comments* section as claimed.

Maskell teaches associating comments (notes, suggestions, etc.) with analyzed variances (fishbone diagramming, resolutions/solutions, issues, etc.; Paragraphs 1-2, Page 35) in an analogous art of performance monitoring for the purposes of enabling workers/businesses to discuss potential reasons for and/or solutions to variances in the performance of the worker tasks (e.g. resolutions to address process inefficiencies).

It would have been obvious to one skilled in the art at the time of the invention that the method for tracking the progress of a task as taught by Standfield would have benefited from capturing comments from workers related to variances reported in the performance of the worker tasks (i.e. process/production inefficiencies) in view of the teachings of Maskell; the resultant method enabling workers/businesses to discuss potential reasons for and/or solutions to variances in the performance of the worker tasks (Paragraphs 1-2, Page 35).

Art Unit: 3623

14. Claims 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maskell, Brian, Performance Measurement for World Class Manufacturing (1991) as applied to claims 26-42 and 45-55 above, and further in view of Modflow Announces the Release of EZ-Track 1.0 (2001).

Regarding Claim 43 Maskell teaches a method for tracking progress on a task further comprising providing a variance card (sheet, board, chart, etc.) to the at least one worker wherein the variance card includes a plurality of reasons (Last paragraph, Page 34; Paragraphs 1-3, Page 35; Paragraph 1, Page 36; Last Paragraph, Page 75).

Maskell does not expressly teach providing predetermined reasons, which may be checked off to record the reason for variance as claimed.

Modflow teaches recording and classifying, via a plurality of predetermined classification codes/categories, reasons for variances (inefficiencies) related to workers, processes and/or machines (Abstract; Paragraphs 1, 3, Page 2; Paragraphs 1-4, Page 3) in an analogous art of performance monitoring for the purposes of enabling businesses to "identify inefficiencies and correct those problems" using a plurality of reports for further analysis (Abstract; Paragraphs 1, 3, Page 2).

It would have been obvious to one skilled in the art at the time of the invention that the method for tracking the progress on a task by at least one worker as taught by

Art Unit: 3623

Maskell would have benefited from recording and classifying, into a plurality of predetermined classes/categories, reasons for process inefficiencies, including but not limited to variances, in view of the teachings of Modflow; the resultant method enabling businesses to "identify inefficiencies and correct those problems" using a plurality of reports for further analysis (Modflow: Abstract; Paragraphs 1, 3, Page 2).

Regarding Claim 44 Maskell teaches associating comments (notes, suggestions, etc.) with analyzed variances (fishbone diagramming, resolutions/solutions, issues, etc.; Paragraphs 1-2, Page 35).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Murray, John, U.S. Patent No. 4,413,277, teaches a system and method for tracking progress on a task by at least one worker the task including a plurality of subtasks using well-known performance measurement and feedback techniques wherein the workers performance is recorded and provided on a writeable medium.

- Corrigan et al., U.S. Patent No. 4,583,280, teach a system and method for tracking progress on a task by at least one work wherein the task includes a plurality of subtasks comprising tracking/determining and analyzing the actual and target number of subtasks completed in a time period/slot.

- Ferriter, Kate, U.S. Patent No. 5,212,635, teaches a system and method for worker productivity (efficiency) measurement and feedback wherein a worker's actual and target (standard, expected) performance of a plurality tasks/subtasks is determined, tracked and analyzed.

- Sellie, Clifford, U.S. Patent No. 5,557,553, teaches a system and method for tracking the progress on a task by at least one worker wherein actual and target task times are recorded on a writeable medium for further analysis and review.

- Musafia et al., U.S. Patent Publication No. 2002/0038235, teach a system and method for recording (log), tracking and analyzing a worker's progress on a task/subtask (i.e. worker performance/productivity monitoring, tracking and analysis,

target/goal vs. actual) for the purposes of improving worker performance, the process and/or the overall plant's productivity.

- Huffman, Jackie, U.S. Patent Publication No. 2002/0178048, teaches a method for recording, tracking, analyzing and reporting on at least one worker's progress on a task/subtask wherein actual and goal number of tasks/subtasks are captured, compared, analyzed and reported on for the purposes of improving worker, business and process performance.

- Fitzpatrick, Measuring Productivity With Employee Task Charts (1988), teaches a method for providing a performance measurement card (report) to workers performing a plurality of subtasks over a period of time wherein workers record the actual number and type of tasks performed.

- Thornburg, Performance Measures that Work (1991), teaches the well known utilization of performance measures for improving worker/business productivity wherein it is recommended businesses utilize a combination of individual and group productivity/performance measures.

- Lean Manufacturing Principles Improve Production (1996), teaches the old and very well known use of productivity monitoring and feedback systems in manufacturing (e.g. Andon boards) wherein at least one workers progress on a task, the task including a plurality of subtasks, is monitored and analyzed in order to provide immediate feedback on the individuals/teams productivity via productivity cards that include such information as actual vs. target output, variance (when the variance is nonzero), shift remaining, and the like.

Art Unit: 3623

- Grant et al., Monitoring Service Workers via Computer (1987), teaches the old and very well known use of worker performance/productivity systems and methods (computerized performance monitoring and control systems) comprising four key design factors: who is monitored (business unit, group, individual), monitoring period/frequency, who receives monitored data (individual, public broadcast, supervisor, etc.) and what activities are monitored (e.g. pacing systems, Figure 1).

- Sampson, Tracking and Teamwork clock in at this shop, teaches a system and method for recording, tracking, analyzing and reporting on at least one worker's progress on a task having a plurality of subtasks for work efficiency analysis and job progress reporting.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (571) 272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10/6/2006

SJ


TARIQ R. HAQIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600